



# MARSHALL STAR

Serving the Marshall Space Flight Center Community

Nov. 26, 2003



Photo by Emmett Given, NASA/Marshall Center

## A&M 'senior day' gets NASA boost

Marshall Center Director David King, left, is interviewed by WJAB radio's Ellen Washington during Alabama A&M University's "NASA/High School Senior Day" on Saturday. King spoke about career opportunities and the importance of higher education during the event. About 6,000 high school seniors attended and had a chance to discuss university programs and talk to Marshall representatives about NASA careers.

## Shuttle Implementation Plan update released

NASA Headquarters release

The latest version of "NASA's Implementation Plan for Space Shuttle Return to Flight and Beyond" was released Monday.

The plan is updated periodically and demonstrates the Agency's progress in safely returning Space Shuttles to flight and implementing the recommendations of the Columbia Accident Investigation Board (CAIB).

Updates in the latest version of the plan include the Space Shuttle Program's initial response to Volume II, Appendix D of the CAIB report; NASA's process for handling Return to Flight suggestions; and preliminary cost estimates for Return to Flight.

The updated Space Shuttle Implementation Plan is available on the Internet at: <http://www.nasa.gov>.

For more information about NASA's Return to Flight efforts, visit: <http://www.nasa.gov/news/highlights/returntoflight.html>.

## Strategic microgravity research benefits NASA's mission

by Tracy McMahan

What do building structures on the Moon or Mars, repairing spacecraft in orbit, protecting space crews from harmful radiation, and building spaceships have in common?

The Microgravity Science and Applications Department at the Marshall Center is conducting strategic research that will affect all these activities.

"We want our basic research to fill technology gaps and thus contribute to advancing the decision point for exploration missions," said Dr. Raymond "Corky" Clinton, manager of the department, which works with NASA's Office of Biological and Physical Research in Washington, D.C. "By performing fundamental materials and processes research that enables ready-to-use

technologies, our researchers will bolster the future of human space exploration and support key projects such as building spacecraft."

Often research performed by this department must take into account a different gravity level than that found on Earth — whether it is a few hundred miles above Earth in the orbits and microgravity environments of the Space Shuttle and International Space Station, or at gravity levels and conditions found on the Moon, Mars and even more distant destinations.

To help map out a strategy for conducting physical sciences research in new areas, hundreds of materials scientists, physicists and engineers from universities, industry, NASA and other government agencies recently gathered at three

See *Benefits* on page 2

## Gravity Probe B launch postponed

from combined releases

After a review of test data, a decision has been made to reschedule the launch of Gravity Probe B for next spring. The launch had been scheduled for Dec. 6 from Vandenberg Air Force Base in California.

"The Gravity Probe B launch has been delayed until spring because of a problem in the payload electronics," said Rex Geveden, Marshall Center deputy director. "Replanning is under way, and a new launch date will be proposed within the next few weeks. The delay is somewhat disheartening, but we are committed to optimizing the chances for mission

See *Launch* on page 4

# Benefits

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workshops at the Marshall Center.

During the first workshop, physicists laid out their plans for developing new radiation shielding analytical models to protect space crews on longer duration missions orbiting Earth and eventually on journeys to Mars and the Moon where radiation levels are even higher. This discussion was led by a group of investigators from the Space Radiation Shielding Program's physics consortia.

They developed a plan to use NASA's new \$34 million Space Radiation Laboratory at the Department of Energy's Brookhaven National Laboratory on Long Island, N.Y. This facility will provide beams of high-energy radiation similar to radiation found in space.

More on this strategic effort and recent grant awards can be found at the Web site: <http://www.radiationshielding.nasa.gov>.

In the second workshop, engineers and materials scientists identified technology challenges and breakthroughs needed to support advances in in-space propulsion systems. In a collaborative forum, scientists and engineers who design and manage advanced propulsion systems for both robotic and crewed spacecraft worked with materials scientists, structural, mechanical, and electrical engineers and manufacturing experts. They discussed everything from materials that might be molded to make lightweight radiators to materials that would become huge, gossamer-thin sails.

The third workshop focused on In-Space Fabrication and Repair – technologies needed to live and move from place to place in space with little or no help from Earth. Three areas were examined:

- Space fabrication — crafting materials for spacecraft, habitats and research facilities in space instead of on the ground
- Space repair — developing materials processes and tools for mending spacecraft, telescopes and other facilities in orbit
- In-situ resource utilization — living off the land by using existing materials in space or on planets to build habitats or to make fuel, oxygen, or other necessities.

“The In-Space Propulsion Program is working to develop the next generation of technologies for use later in this decade and

early in the next,” said Les Johnson, manager of In-Space Propulsion Technology Projects at the Marshall Center. “Not long after that we will need the capability to fabricate or assemble large, lightweight propulsion systems or components in space

simply because they will be either too fragile or too heavy to launch safely from Earth. The fundamental research identified at the workshop, if funded, will go a long way toward helping us determine if this is even feasible.”

At the end of all three workshops, the groups had defined critical research that must be done to achieve NASA's exploration goals and helped define the Microgravity Science and Applications Department's and the Office of Biological and Physical Research Enterprise's strategy for supporting NASA's missions. The information will be used in current and upcoming NASA Research Announcements – the main mechanism for soliciting research proposals

funded by NASA. Information on the current Physical Sciences NASA Research Announcements, which solicits research proposals to address high-priority topics for in-space propulsion materials and in-space fabrication and repair, can be found on the Office of Biological and Physical Research Web site at: <http://spaceresearch.nasa.gov>.

For more information on these new research initiatives, go to the Microgravity Science and Applications Web site at: <http://msad.msfc.nasa.gov/>.

*The writer, an employee of ASRI, supports the Media Relations Department.*



**Dr. Raymond Clinton, right, manager of the Marshall Center Microgravity Science and Applications Department, and retired astronaut Dr. Story Musgrave, discuss how materials might be fabricated in space. Musgrave, a veteran of six space missions, is a technology consultant and recently gave a workshop presentation describing how manufacturing techniques used on Earth might inspire space fabrication methods.**

Photo by Doug Stoffer, NASA/Marshall Center

## Wright brothers, Centennial of Flight exhibit available online

**T**he Wright brothers will long be remembered for their first successful flight on Dec. 17, 1903.

In connection with the Centennial of Flight, the Library of Congress has released an online exhibit of personal papers and images of the Wright brothers. Included in the exhibit are diaries detailing glides and powered flight, family correspondence, scrapbooks and drawings. To view the exhibit, go to <http://memory.loc.gov/ammem/wrighthtml/wrighthome.html>.

# Marshall team member proud of Cherokee roots, helps educate others on Indian culture

## *Marshall celebrates American Indian Heritage Month*

by Jonathan Baggs

It was a sterile environment, that Tennessee nursing home with an ancient woman calling an eight-year-old girl to come closer to her.

The woman wanted to share something with her great-granddaughter.

What Cindy Behel received from the woman that day long ago was perhaps the most colorful gift she could have imagined – the knowledge of her heritage. Her great-grandmother was a full-blooded Cherokee Indian and Behel herself was half Cherokee and Creek. The knowledge was a spark to Behel's imagination that burns brightly today.

"Hearing that when I was so young ignited my interest," Behel said. "I began reading every book I could find on Indians."

Years later, when Behel's children started school in Madison County, they became involved with Indian education activities. "Then I began to take my heritage even more seriously," Behel said. "I got involved and started learning along with my children."

Behel, 37, has taken special interest in American Indian Heritage Month activities at the Marshall Center, where she works as the Ai Signal Research Inc. safety, health and environmental coordinator for the Customer and Employee Relations contract.

She has been a formal member of the Echota Cherokee Tribe of Alabama for 13 years. The tribe is divided into seven "clans" across the state, active not only in promoting American Indian heritage, but in preserving cultural sites. One project is to build a cultural education center on tribal land on Lacon Mountain in Cullman County.

"We also work with the U.S. Forest Service to preserve our cultural sites that are located on national forest land, such as those in the Bankhead National Forest," Behel said.

Making sure relic hunters do not disturb these cultural sites is very serious for the Echota.

"People aren't allowed to dig up city cemeteries, so why should they be allowed to disturb our cultural sites, which, in many cases, also are burial sites? We still use these sites in our traditions to remember our ancestors – the first caretakers of this land," Behel said.

Behel's interest in her heritage also is playing a big role in her wedding next year – a traditional Cherokee ceremony.

"In the traditional Cherokee wedding, the bride and groom enter a circle from the East, which symbolizes 'life,'" Behel said. "Each of us will come in with a blue blanket wrapped around us, which will be removed and both of us will then be draped in a white blanket, symbolizing the joining of the couple."

There are other traditions with deep Cherokee roots that Behel and her fiancé will take part in during the wedding.

"It's more meaningful for me to do this because I am so aware of my traditional heritage," Behel said. "It's a beautiful ceremony that strengthens the bond between a man and a woman. We will become one person."

Though her fiancé is not of Indian heritage -- that he is aware of, Behel said he supports her culture and traditions and accompanies her to festivals where she performs with the Echota Deer Clan Dance Team.

Behel is especially glad that American Indian Heritage Month is recognized and embraced at the Marshall Center.

"Historically, with indigenous peoples

and culture, what people don't understand, they fear or reject," Behel said. "American Indian Heritage Month is a way not only for us to reconnect with our heritage, but it is a way to educate others about our traditions. Even though Indians are part of their own sovereign nations, we also are an important part of this nation – the United States."

*The writer, an employee of ASRI, is the Marshall Star editor.*



**Cynthia Behel wears a Cherokee ribbon dress when she performs the "Ladies Traditional Dance." The shawl represents the tradition of her ancestors, who would carry shawls to a battlefield where they were used to carry injured loved ones back to camp. The fan is used to help carry prayers to heaven during the dance.**

Photo by Emmett Given, NASA/Marshall Center

### Obituaries

**Early D. Wilbourn, 99**, of Paint Rock, died Nov. 1. He retired from the Marshall Center in 1970 where he was a supply clerk in the Astrionics Lab.

He is survived by his wife, Annie Wilbourn; two sons, Bobby Wilbourn and Gwen Wilbourn, both of Paint Rock; two daughters, Barbara Moore and Janice Hodges, both of Paint Rock; eight grandchildren; and 10 great-grandchildren.



## Tree lighting, Holiday Reception set at the Marshall Center

*from the Internal Relations and Communications Department*

**T**he Marshall Center's annual tree lighting ceremony will be at 4:30 p.m. Monday in front of Bldg. 4200.

The Holiday Reception will be from 9:30-11:30 a.m. Dec. 3 in the Center Activities Bldg. 4316. This year's theme is "Skies Filled with Wonder" to commemorate 100 years of powered flight and beyond. The reception will feature music, food and door prizes.

To be eligible for door prizes, team members must make donations of non-perishable food items for the North Alabama Food Bank. Team members also must be present to win.

For more information, call Angela Storey at 544-0632.

## Launch

*Continued from page 1*

success, and so we will work to get this corrected. Our customers in the Office of Space Science support this decision, and our partners at Stanford and Lockheed are committed to the repair."

Data obtained during spacecraft pre-launch testing shows electronic noise on an output channel associated with the No. 1 experiment gyro. This could compromise the quality of data received from it. The problem has been isolated to a component in the spacecraft's experiment control unit. While there is a second available output channel for this gyro, a postponement of the launch will allow time for a repair. This precaution will restore full redundancy to the experiment and provide the greatest chance for success over the planned 16-month life of the mission.

At Space Launch Complex 2, the rocket has successfully completed the scheduled pre-launch preparations up to this time, and there are no issues or concerns with the Delta II. The current plans are for it to remain at the pad enclosed within the gantry-like mobile service tower until the spacecraft arrives.

Gravity Probe B will test two predictions of Albert Einstein's general relativity theory that he advanced in 1916 – the geodetic effect of how space and time are warped by the presence of Earth, and "frame dragging," or how the Earth's rotation drags space and time around with it.

The Marshall Center, Stanford University and Lockheed Martin developed the mission.

### Energy tip

**M**arshall team members can be good stewards of energy conservation by turning off lights and other powered consumer items under their control when they leave the workplace.

To submit an energy tip, e-mail [cedreck.davis@msfc.nasa.gov](mailto:cedreck.davis@msfc.nasa.gov) or [juergen.haukohl@msfc.nasa.gov](mailto:juergen.haukohl@msfc.nasa.gov).

### Holiday Reception bus schedule

**B**uses to the Holiday Reception on Dec. 3 will run in a continuous loop from designated pickup points to Bldg. 4316 and back from 9-11:30 a.m.

Taxi service will be available for Marshall team members not on a shuttle route. A van with a chair lift will be available for special needs. Call 544-8294 (4-TAXI) for either service.

Route 1: 4200 Main 4203 North	Route 4: 4712 Main 4705 South 4708 Northwest 4755 Main
Route 2: 4612 West End 4610 Northeast 4487 South Main	Route 5: Intergraph, between Bldg. 11 & 7
Route 3: 4666 Main 4663 East B Wing 4493 Main 4481 West End 4471 East End	Route 6: NSSTC South

### Job Announcements

**MS04N0054**, Program Analyst. GS-0343-12, Science Directorate, Business Management Office. Closes Dec. 8. Contact: Deborah Longeddy at 544-2308.

**MS04D0055**, AST, Fluid Mechanics. GS-0861-09, Space Transportation Directorate, Subsystems & Component Development Department. Closes Dec. 3. Contact: Jim Bramblett at 544-3398.

**MS04C0056**, Executive Support Assistant. GS-0303-08, Procurement Office. Closes Dec. 4. Contact: Allan Day at 544-4079.

**MS04C0058**, AST, Data Systems. GS-0854-14, Engineering Directorate, Avionics Department, Flight Software Group. Closes Dec. 8. Contact: Allan Day at 544-4079.



Marshall Imaging Services

### Two space visionaries discuss the future

President John F. Kennedy, right, talks with Dr. Wernher von Braun, left, at the Marshall Center on Sept. 11, 1962. It was Kennedy who called for the United States to land a man on the Moon and von Braun who helped accomplish the feat. Kennedy was killed by an assassin Nov. 22, 1963. Von Braun, director of the Marshall Center at the time, also envisioned an orbiting space station, and NASA responded with Skylab in 1973. Von Braun died in 1977. Their vision for space exploration continues today with the International Space Station. Additional photos of Kennedy's visit to Marshall will be displayed in the Heritage Gallery in Bldg. 4200 through Dec. 22.

# Announcements

## **'One NASA Rollout' at Marshall Center set Tuesday**

As part of the "One NASA Rollout" at the Marshall Center, several key Agency leaders will brief Marshall team members during a One NASA Update at 9:30 a.m. Tuesday in Morris Auditorium. Speakers will include Marshall Director David King; Johnny Stephenson, One NASA Implementation Lead; Mary Kicza, NASA Associate Administrator for Biological and Physical Research; Scott Hubbard, director of Ames Research Center; and NASA Deputy Administrator Fred Gregory. Marshall team members also are invited to Return to Flight "break-out sessions" in Morris Auditorium at 1:15 p.m. and 2:30 p.m.

## **'Use or lose' annual leave must be scheduled before Sunday**

Marshall team members with "use or lose" annual leave must have it submitted through WebTads, by e-mail or other means, as long as it is in writing, by Sunday. For more information, see "Inside Marshall" or call Mack Blackman or Amy Rape.

## **Full Cost in Practice course available for Marshall team**

Full Cost in Practice course for Marshall team members will be offered throughout November and December. The course focuses on working and managing in a full cost environment. Participants should bring a calculator. Registration is through AdminSTAR. For more information and course schedules, see "Inside Marshall." For questions on registration, call Tina Smith at 544-7834.

## **'I Think Safe Because ...' badges available Dec. 8**

The Marshall Safety and Health Action Team will be making free "I Think Safe Because ..." badges from 11 a.m.-1 p.m. Dec. 8 in the lobby of Bldg. 4203. Marshall team members should bring a small photo to be laminated onto the card.

## **NASA Exchange book fair set Dec. 2-5 at Marshall**

The NASA Exchange will sponsor a book fair from 9 a.m.-4 p.m. Dec. 2-5 in the lobby of Bldg. 4203. A variety of hardback books will be offered at discount. For more information, call Candy Kelley at 544-7565.

## **Marshall barbershop closed Thursday-Friday**

Chatterbox Barber and Styling Salon in Bldg. 4203 will be closed Thursday-Friday. It will re-open Monday. For more information, call 881-7932.

## **MARS Christmas Dance to be Dec. 6**

The annual MARS Ballroom Dance Club's Christmas Dinner and Dance will be from 6:30-11 p.m. Dec. 6 at the Von Braun Center East Hall. Bands include "The Little Big Band" and the "Nite Owls." Dress will be semiformal and tables seat eight people. Tickets are limited to 500 people and cost \$25 per person. Tickets are available until Dec. 2 from MARS dance club members Jerry Maxwell at 544-1954, Pat Sage at 544-5427, Bob Williams at 544-3998, Tamara Landers at 544-6818, Linda Kinney at 461-0230, Earl Herndon at 534-7408, Joyce Davis at 880-2270, Hugo Berry at 544-3525 and Woody Bombara at 650-0200. To reserve a table for eight, call Joyce Davis.

## **Ovation Arts tickets discounted for Marshall team members**

The NASA Exchange is offering all Marshall team members and retirees a \$2 discount on all Ovation Arts concerts and musicals. To receive the discount, team members or retirees should present their badge at the time of ticket purchase. Tickets are available at Shaver's Books in Huntsville, "Mulberry Street" in Madison and by calling 468-1632 or 468-1633. Scheduled events include "Giuseppe Verdi's Requiem" at 7:30 p.m. Friday in the Von Braun Concert Hall and the "Annual Christmas Concert" on Dec. 12

and Dec. 13 at 7 p.m. at the Madison Municipal Complex. For more information, go to <http://ovationarts.net>.

## **Tactical Interceptor Design Symposium set for Jan. 16**

A Tactical Interceptor Design Symposium will be from 8 a.m.-4:30 p.m. Jan. 16 in the Tom Beville Center at the University of Alabama in Huntsville. The event is sponsored by the university and the American Institute of Aeronautics and Astronautics. For more information go to <http://www.eb.uah.edu/ipt/>.

## **Marshall Exchange Council election ends Dec. 12**

Two Marshall employees, Tereasa Danne and George S. Mitchell, are vying to fill one vacancy on the Marshall Exchange Council. Civil servants must cast their vote by Dec. 12. The Exchange Council develops an annual budget to support various morale and welfare activities on behalf of Marshall team members. For more information, see "Inside Marshall" or go to <http://ntf-2.msfc.gov/exchange.nsf>.

## **NASA Ski Week set for January**

The 13th annual NASA Ski Week will be in Steamboat, Colo., Jan. 24-31. Skiers from nine NASA centers will participate in winter sports and camaraderie at the 3,000-acre resort. All Marshall team members, retirees and family members, are eligible to participate. For more information, call 233-0705 or e-mail [tom.dollman@nasa.gov](mailto:tom.dollman@nasa.gov).

## **CAIB report volumes available**

Volumes II-VI of the Columbia Accident Investigation Board report are available on the NASA Web site at [www.nasa.gov](http://www.nasa.gov). These volumes contain appendices and additional information, which provides supporting documentation for the main text of Vol. I of the report. Hard copies of the Volumes I-VI are available through the Government Printing Office and can be ordered at [www.gpo.gov](http://www.gpo.gov).

# Classified Ads

## Miscellaneous

- ★ Kenwood TS440SAT, needs repair, \$225. 256-536-5417
- ★ Registered saddle breed horse, 12 yrs. old, stud, \$1,300; Mennonite's saddle, \$625. 233-4104
- ★ Wheelchair, \$125; ham radio, Collins 75A4, needs restoration, \$400; Heathkit SB220, needs repair, \$300. 256-536-5417
- ★ Christmas tree, 6-1/2' with stand, \$40. 837-1774
- ★ Meadowcraft patio furniture; sofa, two side chairs, fabric cushions, white/green stripes, never outside, \$400. 256-586-5284
- ★ Pfaff Hobbymatic 955 dual feed sewing machine, \$300. 883-2065
- ★ 2003 Arctic Cat 4-wheeler, 400cc, 2/4 wheel drive, low/high range, 180 miles, \$4,800. 883-9741
- ★ Bakers rack, white w/brass trim, wire shelves, w/glass cut for shelves, \$55. 931-4678
- ★ Kohler piano, upright, light brown, \$300. 694-8741
- ★ Louis Lamour books, \$1.50 each. 722-9989
- ★ Matching sofa and chair, hunter green, burgundy, \$150. 777-0419
- ★ IMAC computer and Epson printer, \$250; washer and dryer, \$100. 536-5132
- ★ 1977 Avion travel trailer, 27' for hunting, fishing, or lake lot, \$4,500. 931-427-2059
- ★ LazyBoy wall-hugger recliner and two cushion reclining sofa, both for \$100. 883-5543
- ★ Four Michelin XC-LT4 tires from Explorer, 225-75R-15, 35-percent usable tread left, \$125 for all. 828-7152
- ★ Soloflex exercise machine w/butterfly and leg attachments, \$120. 656-0461
- ★ Two swivel rockers, cream, \$75 each; two lamps, \$20 each; wedding gown, size 10. 776-9165
- ★ Dept. 56 Snow Village, 27 buildings, 39 accessories, all retired, \$1,500. 837-0037
- ★ Complete Far Side by Gary Larson, two books, unopened, hardbound, every Far Side, \$95. 656-0077
- ★ Walnut finished dresser w/mirror, matching full-size headboard & frame, solid wood construction, \$125. 828-5326
- ★ Traditional queen-size sofa bed; wing-back chair; Samsonite luggage, on wheels. 256-837-0786
- ★ Two-horse trailer, new paint, new pads, new tires, fully enclosed, storage front, \$3,500. 479-3660
- ★ Double patio door, insulated, 12-pane, for 6" walls, 25-year warranty, \$400. 931-607-4849
- ★ Lord of the Rings "The Two Towers" DVD, not extended version, \$12. 426-8892
- ★ AMD Duron 900 Socket A CPU with CPU fan, \$50. 658-4893
- ★ Waterford crystal chandelier, 6-arm; St. Clement French table lamp, hand painted rooster design. 882-6832
- ★ R19 CertainTeed Insulation, 16-pcs. 4' long, \$22; Deluxe Dirt Devil upright vacuum, \$35. 461-8369
- ★ Bikes; girl's, black, 26" 12-speed; Ladies 30" gray touring bike, \$50 each. 852-5092

- ★ Antique upright piano, will need tuning, \$350. 256-828-6325
- ★ 1994 doublewide mobile home, 3-BR, 2-B, lots of modifications and upgrades. 256-527-0705.
- ★ Children's bike helmets, ages 3-5 & 7-9, \$5 each; booster seat, toy caddy, \$15. 890-0755
- ★ Game Boy Color w/brain box, extras; games: Pokemon Silver, Gold, Crystal, Red, Yellow, \$50. 881-1895
- ★ Two sets Pioneer speakers, 6.5", TS-06196/T-06096, 30W, stock from Honda CR-V, \$5/speaker. 765-532-4218
- ★ Cherry finish Queen Anne headboard, king-size, \$250; king-size bed frame available. 233-3215 after 5 p.m.
- ★ Pioneer car stereo, CD, detachable face, Polk/Infinity speakers, MTX amp and subwoofer, \$500. 658-4733
- ★ Precor 820e stationary bicycle, \$75; PingPong table, \$35; New large roof-top car carrier, \$35. 536-6295
- ★ American Bulldog pups, 5G/3B, ready Dec. 2, \$150. 1-205-559-3700.
- ★ Coach handbag, large black leather, \$80. 256-757-0469
- ★ Cannondale R300 52cm CAAD3, 24-gears, TIAGRA components, MAVIC alum rims, \$795. 534-3252
- ★ Sears heavy duty all fabric dryer, \$25. 883-2948
- ★ GE Potscrubber 650 built-in dishwasher, can deliver, \$125. 880-0881
- ★ Nintendo 64 game system w/Madden football game, \$35. 883-8340
- ★ Gold ring, 1/2 karat, size 6, appraisal available, matching band & gold-chip guard bands, \$1,000. 881-2938
- ★ Solid Maple Ethan Allen round dining table, 48", two 15" leaves, pads, \$600. 883-0164
- ★ Palm V accessories kit, modem, charger, wireless web, GSM upgrade, carrying cases, \$10. 772-8489

## Vehicles

- ★ 1993 Chrysler Concorde, 3.6L, loaded, \$2,700; 1997 Ford Expedition, 4x4, 5.7L, Eddie Bauer, \$11,000. 256-233-4104
- ★ 2000 Mazda 626, 4-door, 41K miles, silver w/gray interior, stereo CD cassette, a/c, \$9,950. 256-230-0806
- ★ 2002 Dodge Ram SLT Quad cab, 23K miles, graphite, Line-X bedliner, maintenance records. 880-5182
- ★ 1999 Chevrolet Astro Tiara Conversion van, TV, VCR, blinds, non-smoker, 33.5K miles, \$14,000. 722-9989
- ★ 1997 Ford Explorer XLT, 4-wheel drive, 160K miles, \$5,500. 509-7419
- ★ 1993 Grand Marquis, 172K miles, \$1,300. 776-9165
- ★ 1986 Honey motorhome, 22', 65K miles, refrigerator, stove, microwave, shower, new front tires, \$5,700. 881-8674
- ★ 2001 Hyundai Soata GLS, V6, leather, 44K miles,

- 60K BTB Warranty, stereo CD/cassette, \$12,000. 883-9436
- ★ 1996 Explorer Sport, 5-speed, new tires, 143K miles, \$4,600. 714-2578
- ★ 1982 Silverado, 4x4, rebuilt motor, 350, plus extras \$2,700. 773-8877
- ★ 1998 Plymouth Voyager Expresso, 71K, power seat, luggage rack, running boards, \$6,500. 837-2267
- ★ 2002 Yamaha YZF R6 1600 miles, \$6,000. 232-7564
- ★ 1970 restored MGB, chrome bumper, tan leather, dark metallic green, tan top, \$5,000. 527-4067
- ★ 2001 Chrysler Town & Country LXi, sterling blue, power doors/tailgate, 28K miles, \$15,000. 603-5279
- ★ 1988 Dodge D50, 4-cyl., 5-speed, \$750. 256-586-7015

## Wanted

- ★ Honda Odyssey van, prefer non-smoker. 325-6000
- ★ Corner cabinet; Dell laptop computer. 536-5132
- ★ Used trombone in good condition suitable for a beginner and preferably King or Bach. 232-5552
- ★ Four-Wheeler suitable for 9 yr. old. 316-2902
- ★ Playstation 2, new or used. 890-0755
- ★ Medela Pump-in-Style breast pump. 721-2239
- ★ Hard copy of The Report of the Presidential Commission on Space Shuttle Challenger Accident. 882-0133
- ★ Someone dependable to clean home for elderly couple, price negotiable. 256-828-9221 after 5 p.m.
- ★ Experienced electrician to assist homeowner with wiring new house. 536-7906
- ★ Tickets to Jesus Christ Superstar, VBC, Saturday, Nov. 29, 8 p.m. 232-5552
- ★ "Monopoly" game compatible with Game Boy SP. 306-0700 Decatur

## Free

- ★ Pine poles for building, cut to your diameters and lengths; pine logs for boards. 881-6040
- ★ Older working computer monitors (640x480 or 800x600 max). 256-544-1135

## Lost

- ★ Men's Gold wedding band in or near Bldg. 4203, reward. 544-5771

## Found

- ★ Necklace, parking lot, Bldg. 4200. Call 544-4736 to claim/identify

# MARSHALL STAR

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